All Regional Engineers

Charles J. Ingersoll

Special Provision for Metal Hardware Cast into Concrete

January 9, 2009

This special provision was developed by the Bureau of Bridges and Structures to standardize the corrosion protection for steel inserts and brackets cast into concrete. It has been revised to make a minor revisions.

It should be inserted in contracts with structures involving cast-in-place, precast, or precast prestressed concrete.

The districts should include the BDE Check Sheet marked with the applicable special provisions for the April 24, 2009 and subsequent lettings. The Project Development and Implementation Section will include a copy in the contract.

This special provision will be available on the transfer directory January 9, 2009.

80203m

METAL HARDWARE CAST INTO CONCRETE (BDE)

Effective: April 1, 2008 Revised: April 1, 2009

Add the following to Article 503.02 of the Standard Specifications:

Add the following to Article 504.02 of the Standard Specifications:

Revise Article 1006.13 of the Standard Specifications to read:

"1006.13 Metal Hardware Cast into Concrete. Unless otherwise noted, all steel hardware cast into concrete, such as inserts, brackets, cable clamps, metal casings for formed holes, and other miscellaneous items, shall be galvanized according to AASHTO M 232 or AASHTO M 111. Aluminum inserts will not be allowed. Zinc alloy inserts shall be according to ASTM B 86, Alloys 3, 5, or 7.

The inserts shall be UNC threaded type anchorages having the following minimum certified proof load.

Insert Diameter	Proof Load
5/8 in. (16 mm)	6600 lb (29.4 kN)
3/4 in. (19 mm)	6600 lb (29.4 kN)
1 in. (25 mm)	9240 lb (41.1 kN)"

80203